SITE PLAN APPLICATION & INSTRUCTIONS

APPLICABILITY

The procedure contained in this chapter are applicable to all projects which involve the construction of any facility other than single-family dwellings or minor appurtenances thereto (for example swimming pools, sheds, fences and the like); or three or less duplex (two-family) units in a subdivision where a certificate of completion has been issued for the subdivision by the City. Projects which are subject to site plan review including land developments (other than subdivisions) without structures such as parking lots or streets. Also included are projects which involve the alteration or conversion of existing structures or the change of use of a structure where the site or structure does not meet the current criteria of these regulations. Changes in use shall be evaluated by the City as to the need for a complete site plan review, and possible modifications, based on the nature of the change in occupancy or use, and the need for compliance with current regulations. Any developments permitted under conditional use must additionally undergo the site plan approval process. The provisions of this chapter, where appropriate, are to be applied both on-site and off-site of the development. This document shall be the "governing document for such development. Where there are conflicts or discrepancies with other city policies, ordinances, or regulations, the more restrictive requirements shall govern.

INSTRUCTIONS

The following site plan application instructions are provided for the assistance of the applicant and may be modified from time to time as need dictates.

It is the applicant's responsibility to ensure that the current requirements of the applicable portions of the City Code are met.

The following sections of the City Code of Ordinances apply to site development criteria:

a. *Chapter 5 - Alcoholic Beverages*
b. *Chapter 7 - Buildings and Building Regulations*
c. *Chapter 10 - Fire & Fire Protection*
d. *Ch. 18 - Streets, Sidewalks & other Public Places*
e. *Chapter 19 - Subdivisions*
f. *Chapter 20.5 – Telecommunications*
g. *Chapter 22 – Utilities*
h. *Chapter 25 - Zoning*
i. *Chapter 26 - Special Events*
j. *Ch. 27 - Wellfield & Aquifer Protection*
k. *Ch. 28 - Stormwater Management*

Pre Application Conference.

Applicants must arrange a pre-application conference with the Planning Division to discuss the prospective development prior to starting the project review process. The applicant's engineer and landscape architect shall attend the pre-application meeting. A tentative schedule for completion of the process will be prepared and any additional requirements identified. The planning division shall determine the necessity of other city departments attending the pre-application meeting.

Site Plan Application Submittal

After the pre-application meeting, the applicant shall submit a typed Site Plan Application, three (3) copies of the site plan, at 24" x 36", one copy of this signed instruction document, one copy of fire flow calculations, two (2) sets of storm water flow calculations to the Planning Division and pay the non-refundable application evaluation fee. Applications will be accepted by the Planning staff at least one week after the pre-application meeting on any working day between the hours of 8:00 a.m. and 4:30 p.m. (regular business hours). Payment of the fee does not in any way obligate the City to approve the application. All engineering calculations including stormwater design, traffic impact analysis and fire flow shall be signed and sealed by a professional engineer licensed in the state of Florida.

Survey required

A boundary, topographic and location survey and legal description of the property, prepared by a Professional Surveyor licensed in the State of Florida.

Statement of Authorization

If the applicant is someone other than the property owner, the applicant must include a statement attached to the application that is signed by the property owner which authorizes the applicant to apply for this specific purpose and location on his behalf.

Site Plan prepared by a licensed professional

Pursuant to the requirements of Chapter 471.025, 481.321 and 481.221, FS and Section 25-81 of the City Code, each applicable site plan sheet shall be prepared by an architect, engineer or, surveyor currently licensed in the State of Florida and shall include the following information unless otherwise determined at the pre- application meeting:

1) All survey and site plan drawings must be the same scale. The scale used must be no smaller than one (1) inch equals one hundred (100) feet. Detail plans may be drawn at a scale no smaller than one (1) inch equals fifty (50) feet. This information may be combined in the provided drawings so long as they remain relatively uncluttered.

2) A statement listing the name of the developer; the owner of the real property which is the subject of the development; the name of the proposed development and a general statement of all objectives giving the purpose and character of the proposed development. (See application form).

3) A vicinity map showing the location of the proposed site plan, showing relationships to surrounding streets and thoroughfares, existing zoning on the site and surrounding areas, and existing land use on and surrounding the site.

4) A boundary, topographic and location survey bearing the legal description of the property, dated no later than 180 days before the first submittal, prepared by and bearing the original signature and raised seal of the Florida Licensed Professional Surveyor and Mapper.

5) A topographic survey showing existing contour intervals of one foot on a fifty (50) feet off the site and proposed finished elevations based on the most recent United States Geodetic Survey topographic data prepared by a professional surveyor and professional engineer who are licensed in the State of Florida.

6) A table showing acreage for the parcel under consideration and a table of proposed net and gross densities for residential land uses.

7) A statement and map describing the planned phases of development, if any. Note: Approval of a phased plan does not constitute approval of subsequent phases.

8) The Site Plan shall show all structures including roadways, sidewalks, parking lots, recreation areas, utility and exterior lighting installations.

9) A survey of the existing trees by species, diameter and approximate height. The survey must indicate which trees will be removed by the construction.

10) A statement of the traffic generated during the PM peak hours as based on the Institute of Traffic Engineers Trip Generation Manual, fifth edition (or most current update or edition), or a more detailed traffic impact analysis as determined at the pre-application meeting.

11) Two sets of stormwater calculations signed and sealed by a Florida Registered Professional Engineer.

12) Any other information as may be identified in the pre-application conference.

13) Any other information required by City Code as may be amended from time to time.

Site Plan Review Process

The Planning staff shall transmit a copy of the application package to the appropriate technical staff under the following procedures.

1)	Each application shall be transmitted no later than the Wednesday after an application is submitted. The application transmittal notice will indicate a deadline by which the comments are to be received. Department comments will be brought to the DRC ten (10) working days after the application is transmitted. The DRC will discuss the department comments with the developer and/or his representatives. The applicant, the civil engineer and/or the landscape architect shall attend the DRC meeting. The DRC will meet to clarify comments; to approve the comments and to provide direction for the meeting with the developer and the developer's representatives.
2)	Within 24 hours before DRC meeting, staff will e-mail a copy of the comments to the contact person listed on the application.
3)	The DRC shall be chaired by the Planning and Zoning Director or designee.
4)	The DRC shall have a formal agenda to be prepared by the Planning staff.
5)	The DRC shall consider each item on the agenda and after the developer and/or developer's representatives have had an opportunity for discussion, questions and responses to the comments, the DRC shall deny, approve or approve with conditions the application for site plan approval. Any action of the DRC (including denial) may be appealed to the Development Services Director. An appeal must be filed with the Development Services Director in writing within thirty (30) days of the date of the DRC action. If an item on the agenda does not have a representative in attendance for the developer, it shall be postponed until the next scheduled DRC meeting.
6)	If an application is denied, the DRC must find cause and provide recourse for the applicant. The developer shall then have one hundred and twenty (120) days to submit a revised application on any regular submittal day. If the developer fails to resubmit within one hundred and twenty (120) days of DRC denial, a new application and an additional application fee must be submitted to the Planning staff. This provision may be waived by the Development Services Director.
7)	Any application which is denied twice by the DRC shall not be accepted again by the Planning staff without an additional site plan application fee. Every subsequent submittal after a denial shall require a payment of an additional site plan application fee.
8)	After approval of the plan, the applicant shall supply six (6) sets of the plans with approved revisions as directed by the DRC to the Planning staff for stamping.
9)	Upon DRC approval of the site plan a final development order will be issued by the City. Construction activity may not commence on the site until copies of the St. Johns River Water Management District permits are provided to city staff. Copies of other agencies permits must be provided to the City prior to issuance of a certificate of occupancy.
10)	No building permit, site work, or land clearing, may begin until a Final Order is issued. An arbor permit must be issued by the Planning Division prior to the issuance of a site clearing permit from Public Works.
11)	Conveyance of proposed easements (if any) and City approval of proposed easements/agreements must be completed prior to the issuance of a building permit.
12)	Only complete sets of site plan drawings will be accepted.
13)	The site plan approval automatically expires 366 days after the date of the Final Order, unless a complete building permit application package has been filed with the Development Services Department.
14)	Approval of a site plan does not release the applicant from obtaining all necessary building permits, arbor permits, sign permits, applicable state agency permits, occupational licenses from both the City and Lake County, and pay all applicable fees, including Lake County Road Impact fees, prior to receiving a Certificate of Occupancy.
15)	The applicant is hereby notified that all actions regarding this site plan application are based on the information provided on the engineering site plans, the landscape plan and the application form. Neither the applicant, nor his successors, may substantially change the use, or occupancy of this site without the written permission of the City. The applicant shall be totally responsible for all submission materials.

CHECKLIST FOR TREE REMOVAL PERMIT APPLICATION COMPLETION

The following information is required to be submitted when applying for a TREE REMOVAL PERMIT:

1. ____ General application form (pg. 1).

2. ____ Site plan, drawn to an appropriate scale, showing the following information:

____ Project name, street location, and number.

____ Size and shape of lot.

____ North arrow, date, and scale.

____ Name, address, telephone number of the property owner and petitioner.

____ Property boundaries.

____ Location of all individual trees, other than non-preferred trees, which are four (4) inches DBH or greater, including DBH of each tree, its location, and its common name.

____ A written table that indicates each type of tree that is to be removed and each type of tree which is to remain on the site. The number of inches (DBH) for each type of tree is to be included in the table.

FILING FEE: PRICE INCLUDED IN SITE PLAN FEE

PERMIT REQUIREMENTS:

(1) **Application.**

a. All new subdivisions shall be required to submit an application for a tree removal permit at the time if initial submittal of the subdivision plan to the City so that consideration may be given to the protection of native trees and vegetation.

b. Any commercial, industrial, multi-family, or other use, requiring site plan approval shall be required to submit an application for a tree removal permit at the time of site plan submittal so that consideration may be given to the protection of native trees and vegetation.

(2) **Forms and submittal requirements for a tree removal permit.**

a. An application for tree removal shall be filed on forms provided by Leesburg Planning & Zoning Division. Completed applications shall be returned to the Planning & Zoning Division with the following:

A complete inventory of the trees to be retained and removed shall be shown on a scaled site plan indicating:

1. Property boundaries;

2. Location of all individual trees, other than non-preferred trees, which are four (4) inches DBH or greater, including DBH of each tree, its location, and its common name; and
3. Reasons for removal of trees.

b. A clearing permit shall be secured in concurrence with the tree removal permit if clearing, grubbing, and grading is planned.

(3) **Criteria for Issuance.** No tree removal permit shall be issued unless the reviewer finds that at least one (1) of the following criteria has been satisfied with respect to each protected tree designated for removal under this permit.

a. That the tree is located within an existing or proposed right-of-way;

b. That the tree is located within an existing or proposed easement; or stormwater management system;

c. That the tree is located where its continued existence would unreasonably interfere with the physical construction of the improvements on a particular site as may result from interference with the access to the site by construction equipment, or with the operation of the equipment on the site in the immediate vicinity of the proposed structure or improvements;

d. That the tree is located where it creates or will create a safety or health hazard, or a nuisance with respect to existing or proposed structures or vehicle or pedestrian routes, and relocation of the tree on the site is not a feasible alternative;

e. That the tree is located where it interferes with the installation, delivery, or maintenance of existing or proposed utility services to the site;

f. That the tree is diseased, injured, or in danger of falling;

g. That the tree is located on a portion of the site to be used for construction of required parking areas or vehicular and pedestrian ingress and egress areas;

h. That the tree is located on a portion of the site where structural development is proposed provided reasonable effort has been made to preserve protected trees to the extent feasible under this criterion.

(4) **Expiration.** The tree removal permit, when issued, shall specifically identify which trees shall be permitted to be removed. Such permit shall expire at the time of issuance of the last Certificate of Occupancy for the subdivision or, at the time of issuance of the Certificate of Occupancy for any commercial, industrial, multi-family, or other structure. Trees not removed during the life of the permit may not be removed without the issuance of a new permit based upon a new application.

(5) **Removal Requirements.** Tree removal permits authorize the removal of trees specified within the permit. It is not required that all trees contained within the tree removal permit be removed by the applicant, however, no more trees than are specified in the permit may be removed without modifying the permit.

CERTIFICATE OF OCCUPANCY NOTICE
- AS BUILTS REQUIRED

Before Staff conducts a final inspection for Certificate of Occupancy, two (2) sets of As-built Drawings must be submitted, including a letter of Certification from the Professional Engineer of Record.

The City's definition of As-built Drawings are the original City approved construction plans revised to reflect any and all changes made during the course of construction of the project. A line striking out the original information with actual information being written immediately adjacent will indicate changes.

Minimum required information is all invert and control elevations, changes in material types or sizes, all utility locations and appurtenances to include but not be limited to valves, plugs, blow-offs, hydrants and meters, two perpendicular cross sections through the center of each storm water pond and any changes in location or configuration of parking areas, ponds, building, etc.

These plans are to be signed and sealed by the Engineer of Record and a Florida licensed surveyor as appropriate and stamped "As-Built" or "Record Drawings". A letter signed and sealed by the Engineer of Record certifying that the project has been completed in conformance with approved plans and specifications shall also be submitted.

DIGITAL PLAN SUBMITTAL REQUIREMENTS

1. Drawing files shall be submitted in native AutoCAD release 2004 or 2007.

2. ONE copy of all files shall be delivered on a windows compatible DVD or CD to the Planning & Zoning Division of Community Development.

3. Nonstandard AutoCAD support files (I.E. Font, Shape, Plot Style Table, ETC.), used in the drawing files shall be supplied by submitter.

4. All drawing files shall be audited and the unused layers and entities shall be purged.

5. All digital plans shall be drawn at a 1:1 scale in model space. The Horizontal Datum shall be NAD 1983, State Plane Coordinate System, Florida East Zone, US Survey Foot. The Vertical Datum shall be NAVD 1988, US Survey Foot.

6. Drawings shall include all existing improvements and all improvements to be added and/or removed from the site.

7. Drawings shall include all existing and proposed utilities.

8. All submittals shall show the limits of the area to be improved and the boundary of the entire parcel and/or parcels involved in project.

9. If using Xref files or Aerial Photography, the corresponding files shall be included.

10. Drawings shall be submitted with the initial submittal, each re submittal and in final approved form before issuance of the first permit. All submittals shall be accompanied with a complete set of plans. No single pages that were disapproved or changed by owner or designer.

11. Drawings that use layout tabs for multiple pages in a set of plans shall be labeled to match the drawing Index listed on the cover sheet. Submittals that include multiple individual files for each drawing page shall be titled using the drawing index numbering system.

- This does not eliminate submittal of hard copies for distribution by the Planning and Zoning Department.

City of Leesburg
Electric Department
General Requirements for Development Review

The City of Leesburg Electric Department has developed a 2006 Service Requirements book, called the "The Blue Book". The Blue Book details the requirements for residential and commercial services. This book is available on line at www.leesburgflorida.gov under the "Businesses" pull down tab. Copies are also available at Customer Service at City Hall, the Building Department as well as the Electric Department.

General Site Plan Requirements

1. All existing facilities including but not limited to electric shall be located and identified on the site plan.
2. Any facilities requiring relocation or removal shall be noted on the site plan.
3. A proposed service location shall be marked on the site plan.
4. A proposed transformer location (if required) shall be noted on the site plan.
5. Proposed or existing utility easements shall be noted on the site plan.
6. Lift stations that will require an electric service shall be noted on the site plan along with the projected load and requested service voltage. Lift stations less than 5 HP shall be 240 volts single phase. Lift stations 5 HP or greater shall be 240 volts or 208 volts three phase delta.
7. Site plan shall be submitted to the GIS division in the approved AutoCAD format (2000 Auto cad or newer version).
8. Easements will be required to install infrastructure on private property. All easements will be deeded to the City prior to final site plan approval. See Sec. 25-450. Utility easements, of the Municipal code, for easement requirements. Additional easements may be requested as needed.

Commercial Development Requirements

1. Permits shall be obtained by the developer or their contractor, approved and verified by the City of Leesburg Electric Department before the design of the electric utilities begins.
2. The developer or the contractor must schedule an appointment with an Electric Department Field Engineer in advance to determine meter locations, temporary service locations, transformer locations and misc. electrical equipment on site.
3. The Electric Department Field Engineer will determine the cost of aid to construction if applicable according to Leesburg City ordinances (Sec. 25-474. Installation of electrical distribution system). This fee shall be paid prior to any construction work beginning.
4. All services must be installed by the developer or their contractor to City of Leesburg Electric Department's point of delivery, which will shall be determined by Leesburg Electric Department. Such service installations shall adhere to the latest editions of the NEC, NESC, all applicable State and local codes and City of Leesburg Electric Department's requirements.
5. The site must be to within 6" of final grade before installation of electric facilities.
6. All electric facilities shall be installed before landscaping and irrigation.
7. Contact Electric Superintendent at 352-728-9819 or 352-728-9830 to schedule all work.
8. Appropriate service orders shall be obtained from customer service prior to any meters being installed.
9. The City will not be responsible for any compaction that has to be done as a result of installation of underground electric utilities.

Subdivision Requirements

1. An electrical layout and design will be completed only after the subdivision plat is approved by the appropriate authorities.

2. The electric department will provide a cost estimate to the developer prior to construction. The cost estimate will be based on current City of Leesburg Electric Department policy and practices. See Sec. 25-474. Installation of electrical distribution system, in the City of Leesburg's Code of Ordinances. The cost estimate will be good for 6 months.

3. An agreement will be sent to the developer detailing the cost estimate and payment requirements. This agreement must be signed and returned to the Leesburg Electric Department with the required payment.

4. Lift stations less than 5 HP shall be single phase 240 volts. Lift stations in excess of 5 HP shall be three phase 208 or 240 volt delta. Any other configurations must be approved in the design phase by Leesburg Electric Department.
5. Services for gates and or signs shall be noted on the plans.

6. All required easements will be platted with the subdivision plat. Please refer to Sec. 25-450. Utility easements, City of Leesburg Municipal Code of Ordinances.

7. When multiple utilities are located on a corner lot, the electric department request that water and/or sewer connections by wyed for ease of pad mount installation.

8. All road crossings will be installed by the electric department prior to stabilizing the road base.

9. The subdivision will be at grade prior to the start of any installation of underground.

10. It is the responsibility of the developer to insure that all lot corners and easements shall be staked.

11. The developer can request leased lighting from the City of Leesburg Electric Department for the residential streets.

12. The City will not be responsible for any compaction that has to be done as a result of installation of underground electric utilities.

13. Call 352-728-9830 or 352-728-9819 (Electric Superintendent) to schedule all work.

14. A preconstruction meeting will be required between the developer and City of Leesburg Electric Department personnel. Construction schedules will be discussed at this time. Please contact the Electric Superintendent to schedule this meeting.

GENERAL BUILDING & COMMERCIAL MANUFACTURED BUILDINGS

FOR YOUR INFORMATION

GAS DEPARTMENT - GENERAL REQUIREMENTS:

1. Application for gas service order must be made at Customer Service, City Hall, 501 W. Meadow St., Leesburg, 352-728-9800 for installation of, permanent meter and change of service.

2. New construction or development may require prepayment, by the developer, of costs to be incurred for installation of gas utilities.

3. An estimate will be prepared for costs to be incurred in the installation of gas utilities. The estimate will be valid for 6 months from date of preparation. After estimate has been prepared, changes made to the "FINAL" plan, which would increase the contract price, will be at the expense of the developer. Final site plan must be submitted in 1"=100' scale preferably on a 3-1/2 diskette formatted for AutoCAD - Release 12 for DOS, Version C3.

5. When construction is ready, customer must notify City Hall to schedule the installation of the service. Minimum installation time is 48 hours after Gas Dept. has been notified due to the Florida State One Call Location Statute. **Please call for scheduling of service before sod or sprinkler installations. The Gas Department will not be responsible for replacing the sod or repairs to the sprinkler system.**

6. Grade of property must be within 6 inches of final grade before installation of gas will begin.

7. The City will not be responsible for any compaction that has to be done as a result of installation of underground gas service.

8. All lot lines must be clearly marked on site before installation of gas begins.

GAS DEPARTMENT REQUIREMENTS FOR STRUCTURES:

1. Customer must call Gas Dept. to schedule appointment with field engineer technician to meet at job site to spot locations for the following: a) meter installation; b) permanent service location; c) permanent meter installation; Customer must have address for location before job can be processed.

2. All Plumbers must pipe out the gas service stub on the same side of the house as the water meters are set

3. To include a 3 foot separation from any electrical box, or A/C unit also not permitted directly under any window or behind any door. City of Leesburg Gas Ordinance Division 3.1 of Chapter 25, Section 25-501, ordinance #06-32 City of Leesburg Gas Department 306 South 6fh Street Leesburg, Florida 34748 (352) 728-9840.

Synopsis of Natural Gas Construction Specifications

1. A permanent utility right-of-way easement shall be provided for all natural gas mains, services, regulator stations, and associated or ancillary equipment.

2. Plans shall be provided on paper drawings and in AutoCAD format, NAD83 datum, on a CD showing the location of all gas mains, valves, services, meters, and regulator stations.

3. All mains and services shall be constructed in accordance with U.S. Department of Transportation Regulations, Title 49 CFR, Part 192, Florida Public Service Commission Rules Chapter 25-12, and the Florida Administrative Code (F.A.C.)

4. All mains and services shall be United States domestic, welded, steel pipe with fusion bonded epoxy (FBE) coating.

5. Joint coating shall be of approved material and method.

6. Mains shall be API 5L Grade X42.

7. Services shall be ASTM A53 or ASTM A106(high temperature) steel pipe, and shall be ¾" or larger.

8. No steel pipe will be unloaded unless it is accompanied by a Mill Test Report for the actual pipe on the truck.

9. ALL welders shall be tested on the pipe material and each size to be used and shall be approved by the City of Leesburg Gas Department.

10. Valves shall be class 300, Ballomax welded steel complete with valve box.

11. Mains shall have a minimum depth of cover of 30 inches as measured from the finish grade to the top of the pipe or top of the service No-Blo™ tee fitting.

12. Services shall have a minimum depth of cover of 18 inches as measured from the finish grade to the top of the service or associated fitting.

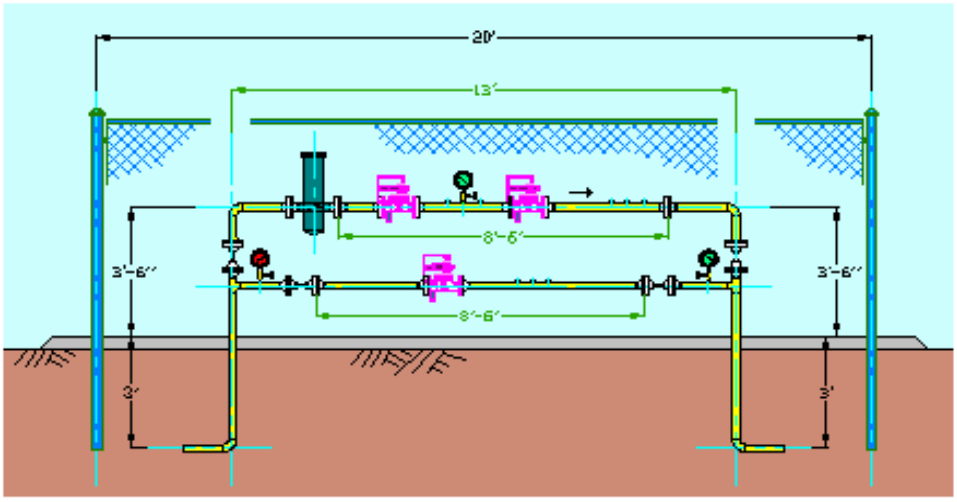
13. Each main (or service?) must be installed with at least 12 inches of clearance from any other underground structure, and shall provide enough room to allow proper maintenance and be located so as to provide for protection against damage that might result from proximity to other structures.

14. Natural gas meters must be located for efficient meter reading, and shall not be obscured with landscaping. If electricity is provided by the City of Leesburg, the gas meter may be required to be located near the electric meter. When possible, one service line should branch to feed two meters.

15. Regulator Station(s). See Typical Regulator Station.

16. Gas Meter Set. See typical Natural Gas Meter Set.

Typical Natural Gas Regulator Station



Most new housing developments will require at least one regulator station per 500 homes. The regulator station(s) shall meet the following requirements:

An area shall be provided for each regulator station. When practical, as determined by the City, the area shall include a driveway or other area for safe parking of gas maintenance vehicles away from normal traffic flow. This area shall be readily accessible 24 hours per day and shall not be within another lockable area such as a maintenance area unless City approved access is provided. Gated communities shall always provide current gate codes.

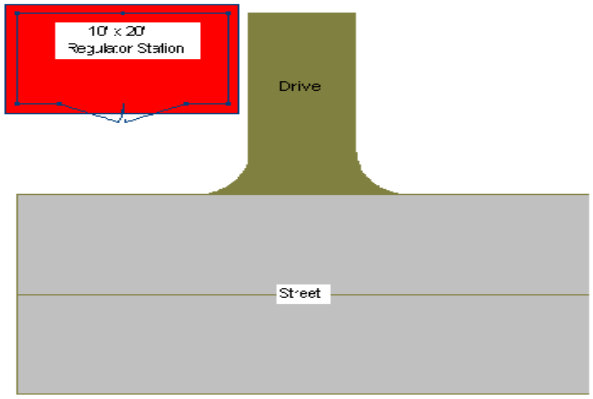
Regulator stations shall be fenced and shall typically be a minimum of 10 feet by 20 feet inside the fenced area. A 12-foot double gate shall be centered on the long side.

Inside the fenced area and to 1 foot outside the fence, the ground shall be covered with a weed control fabric and 4 inches of gravel.

Landscaping may be used if desired or required by local code, but will not be permitted within the fenced regulator station, and shall not obstruct the gate or limit access to the station. Tree limbs shall not be allowed to hang over into the station.

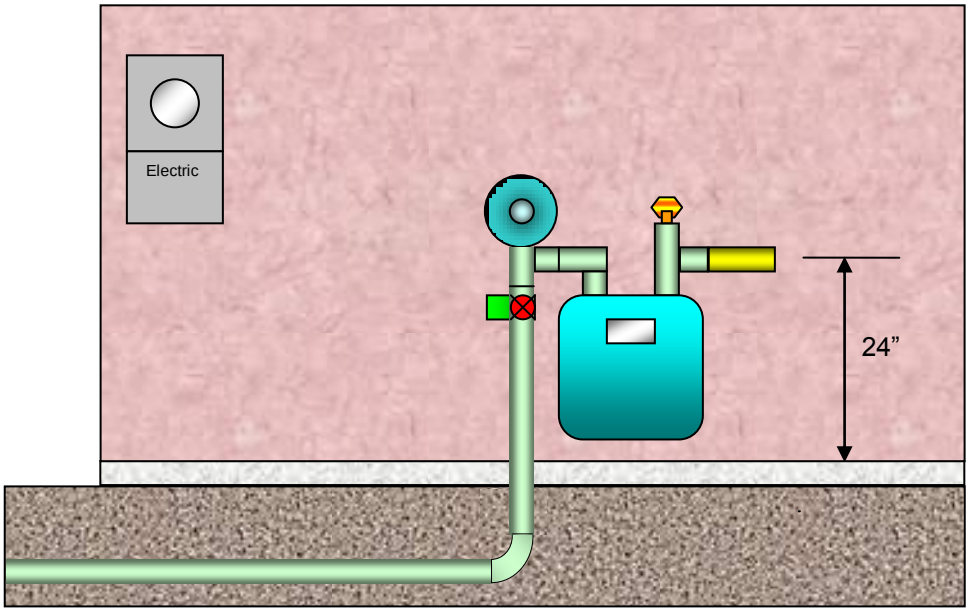
A SCADA (Supervisory Control and Data Acquisition) system may be required to monitor the gas system for safe operation. A VHF antenna of up to 20 feet in height may be installed.

An underground valve shall be located no less than 100 feet or no more than 500 feet upstream of the regulator station so that it may be isolated in case of emergency.



Typical Regulator Station Site Plan

Typical Natural Gas Meter Set



Pictured above is a typical City of Leesburg natural gas residential meter set. The Gas Department is responsible for the installation of the gas meter and regulator.

1. The meter will be located in the general vicinity of the electric meter when served by the Leesburg Electric Department.

2. The meter installation shall comply with all applicable codes and ordinances.

3. The City of Leesburg will set the meter after the service line has been run.

4. The customer inlet stub to the building shall be located 24” above the finished slab and extend no more than 8” from the finished wall.

5. The plumbing contractor is responsible for making the connection from the house piping to the gas meter. Care should be taken to keep the service riser plumb and the meter level and square to the building.

6. **Natural gas will not be turned on if a meter is misaligned or in a bind.**

7. The City of Leesburg will provide a plugged tee at the outlet of the meter for connection to the house piping by the contractor. A brass fitting and cap is attached to the top of the tee. This is for testing purposes and should not be used to connect house piping.

Figure 5-29. Drain Line Attached to a RP. In order for the relief port to function properly, it should not be blocked or reduced in size. If a drain line is provided, the appropriate air gap should be" maintained.

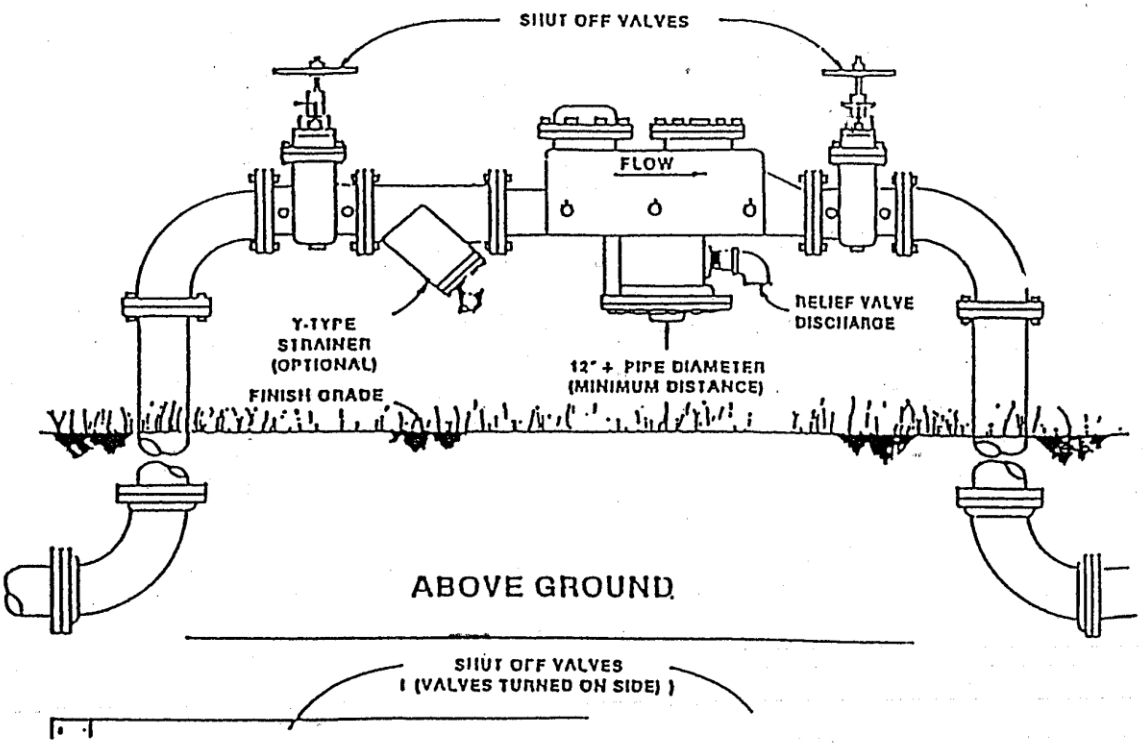
A Detailed Look at the RP

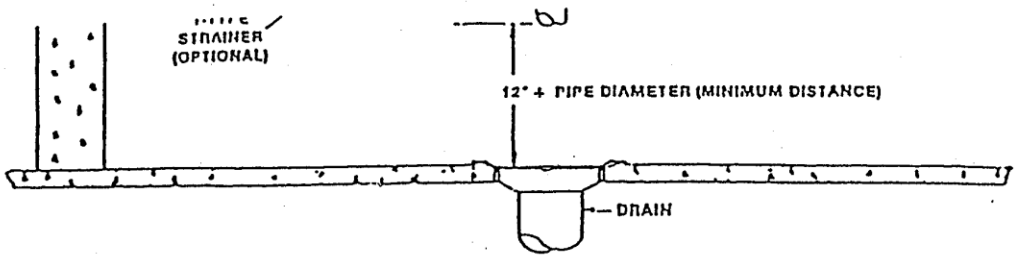
This section explains in more detail how the RP will function to prevent backflows even when one or both of the check valves are fouled or there are other problems that prevent the assembly from working normally. This section will cover: 1) Failing first check valves, 2) Failing second check valves, 3) Clogged sensing line, and 4) Failing relief valve.

1) Failing First Check Valve - If the first check valve fails, the zone pressure can theoretically increase until it equals the supply line pressure creating equilibrium across the check valve. In reality, however, this equilibrium is never reached, because the combined zone pressure.

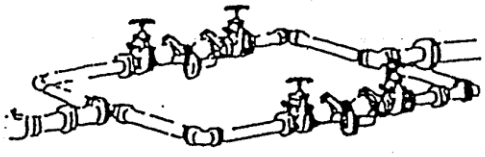
REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE

TYPICAL INSTALLATION



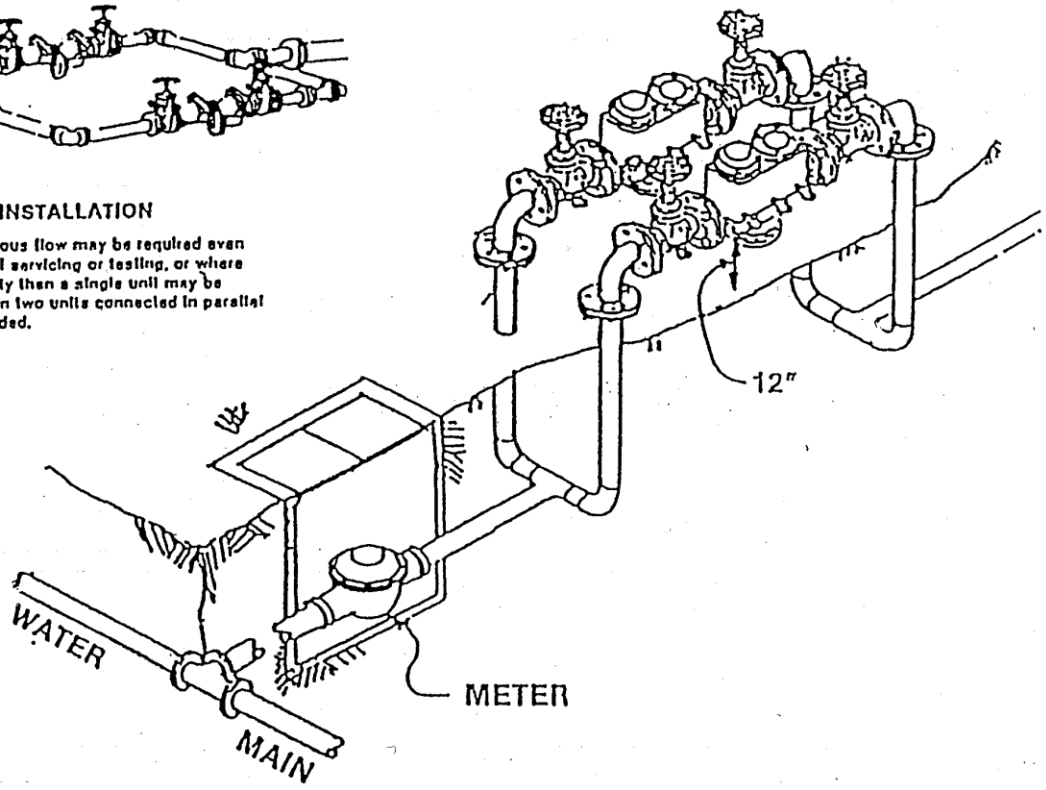


INDOORS
(IF ABSOLUTELY NECESSARY)



PARALLEL INSTALLATION

Where continuous flow may be required even during times of servicing or testing, or where greater capacity than a single unit may be necessary, then two units connected in parallel are recommended.



METHODS AND MECHANISMS FOR PREVENTING BACKFLOW

Assembly Installation

In general, all backflow preventers must be installed so that they can be easily tested and repaired. If double check valve .assemblies must be installed in a pit, chamber or vault, provisions must be made to ensure that the assembly does not become flooded. If an assembly is installed in a deep chamber, the chamber should be self-venting. The assemblies must be protected from vandalism and freezing, and water lines should not be used for electrical grounding purposes. Prior to actual installation, the water lines should be thoroughly flushed to remove loose materials that could foul the backflow preventer. In addition, it is recommended that a strainer be located .prior to the assembly to trap any loose materials that could otherwise foul the assembly. It is also a good idea to provide a blow-off valve after the backflow preventer. The blow-off valve can be used to remove grease and foreign materials that are produced when repairing the assembly, or to flush the customer's water line of any contaminants after a backflow incident without contaminating the backflow preventer. When installing any of the assemblies or devices, safety precautions must be observed. Additional safety precautions are covered in Chapter 6, Testing and Maintenance.

T & P Valves

While the protection provided by backflow preventers clearly outweighs any drawbacks associated with them, backflow preventers can create hazardous conditions by preventing the backflow of water from water heaters. According to plumbing regulations, all hot water- heaters are required to have Temperature and Pressure (T & P) valves. These valves are designed to open and discharge water from the water heater when the temperature or pressure reaches a critical level. They function as a safety mechanism. However, these valves have a small .percentage of failures, commonly attributed to improper installation and inappropriate usage or improper maintenance (T & P valves need to be exercised periodically).

If the T & P valve fails and a backflow preventer (e.g., DC or RF) is installed on the potable water line, the pressure can build up to explosive levels since there is no place for the increased pressure to vent. In Oklahoma, seven people were killed when a hot water-heater exploded because the temperature probe of .the T & P valve had been removed prior to installation (1).

When backflow preventers are installed, the customer should be informed about the problems created by non-functional T & P valves. This can be done through bill stuffers, news letters or flyers.

Testing and Maintenance

6-25 would probably not be detected during testing. Reviewing the test results of a particular back flow preventer over a number of years can also provide an indication as to whether the assembly may require disassembly and cleaning. Any time the test results of a backflow preventer vary significantly from past results, this indicates a need for cleaning and inspection. Other indications of the need for maintenance and repair are supplied by evidence of dumping or dripping around RPs or PVBs. At a minimum, every assembly should be disassembled, cleaned and inspected every two to three years to detect these special types of problems. Any maintenance performed should be recorded on the testing form. For example, cleaning and lubricating should be noted under the "comments" section of the form, including the type of lubricant used. Also, signs of wear should be recorded on the test form.

Some manufacturers recommend that certain parts be lubricated periodically. If parts are lubricated, the lubricant should be approved by the manufacturer, as some lubricants react with plastic and cause early aging. Lubricants must also be food grade quality as approved by the Food and Drug Administration, since they are in contact with the potable water supply.

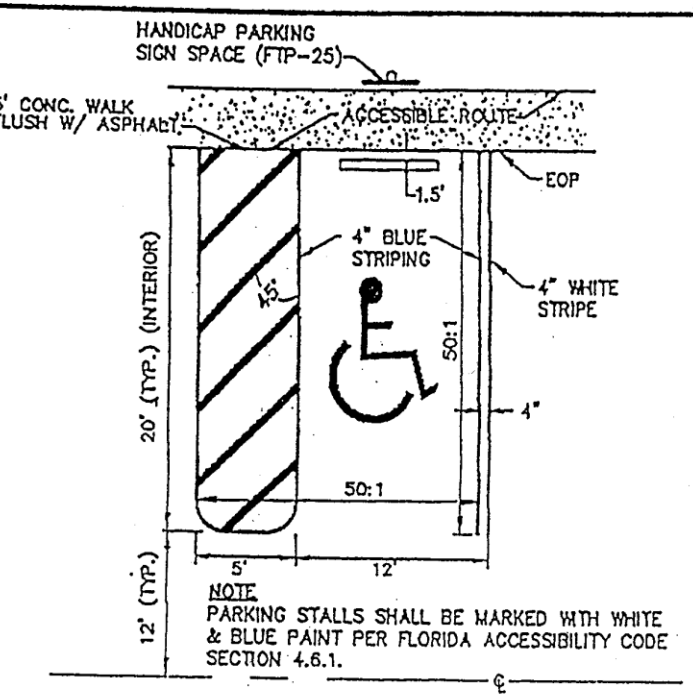
Routine maintenance should also include simple safety precautions such as plugging the test cocks of DCVAs that are installed in pits. This is done to prevent contaminants from entering the potable water supply through the test cocks in the event the pit floods. While pit and vault installations should be avoided whenever possible and the specifications for these installations should prevent flooding, plugging the test cocks provides an added margin of safety.

After routine maintenance is performed, the backflow preventers should be retested to ensure that they function properly.

Safety

Whenever backflow prevention assemblies are tested or repaired, adequate safety precautions must be taken to prevent accidents. Prior to testing or repairing assemblies, the water lines should be checked to determine if they are being used as an electrical ground. While the practice of using water lines as an electrical ground is highly discouraged (since it contributes to early deterioration of the pipes), a check is necessary prior to beginning work. If the pipe is being used as a ground, appropriate steps should be taken to remove this grounding wire and find a replacement grounding source.

If an assembly is installed in a deep pit or chamber, the atmosphere should be checked before entering to ensure the pit does not contain any toxic gases. Conversely, when backflow preventers are installed near ceilings, above drop ceilings, or in other hard-to-reach locations, care should be used to prevent falls.



NOTE:

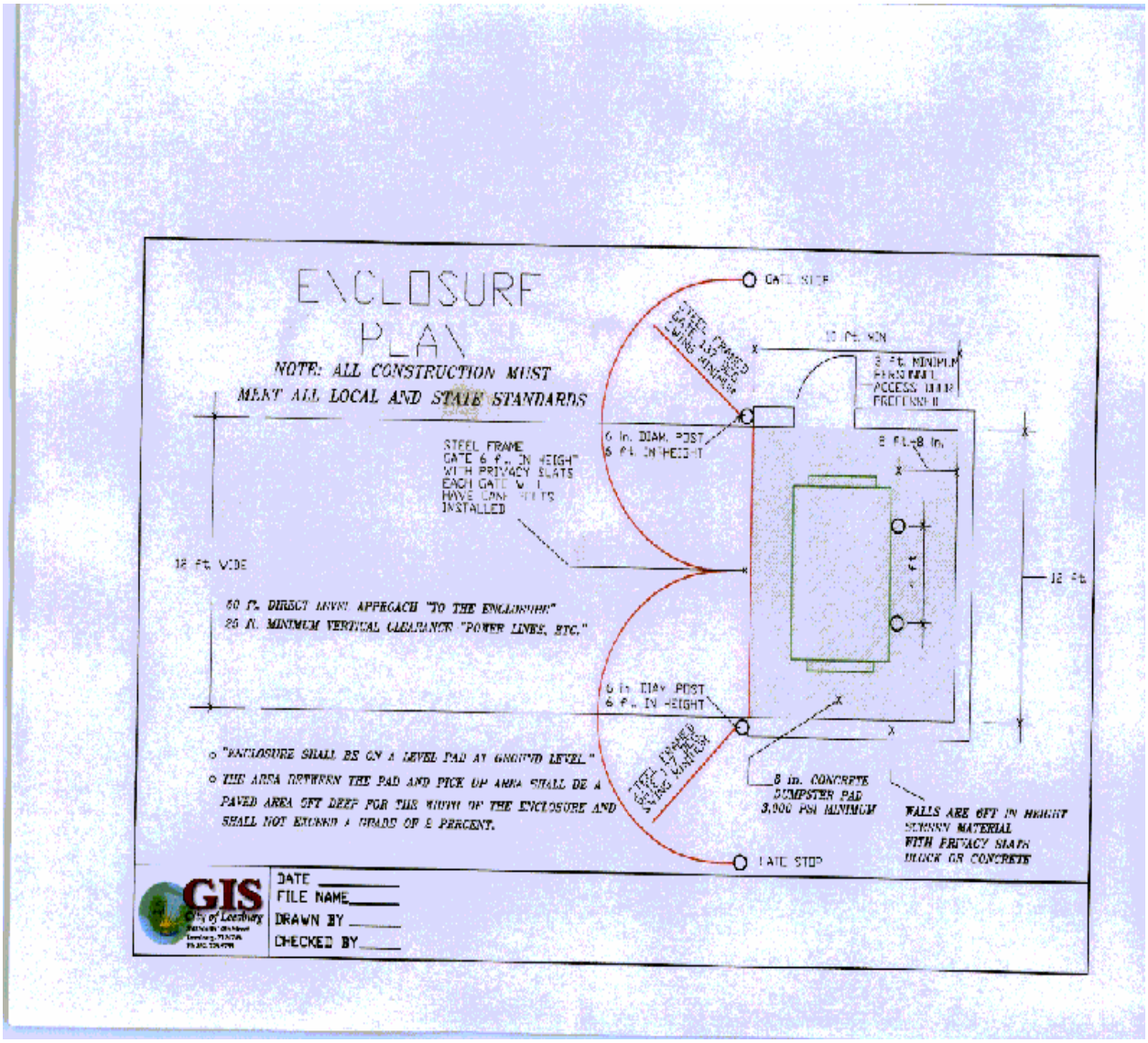
1. ACCESSIBILITY: A) IN ACCORDANCE WITH THE FLORIDA ACCESSIBILITY CODE FOR BUILDING CONSTRUCTION, 4.1.3 SECTION (1), DATED OCT. 1997 AT LEAST ONE ACCESSIBLE ROUTE COMPLYING WITH 4.3 SHALL CONNECT ACCESSIBLE BUILDING OR FACILITY ENTRANCES WITH ALL ACCESSIBLE SPACES AND ELEMENTS WITHIN THE BUILDING OR FACILITY. DOORS ACCESSING THE BUILDING MUST BE DEPICTED ON SITE PLAN. RAMP DETAILS WITH SLOPE INFORMATION SHALL BE DEPICTED ON SITE PLAN. B) THE LOCATION OF HANDICAPPED PARKING STALLS, LOADING ZONES, SIDEWALKS AND RAMPS ON SITE SHALL MEET CHAPTER 316.1955 OF THE FLORIDA STATUES AND SECTION 4.1.3 OF THE FLORIDA ACCESSIBILITY CODE. : RAMPS SHALL NOT EXCEED 12:1 SLOPES PARKING SPACE AND AISLE SHALL NOT EXCEED 50:1 CROSS-SLOPE. (TLO 11-26-96) 12-11-96

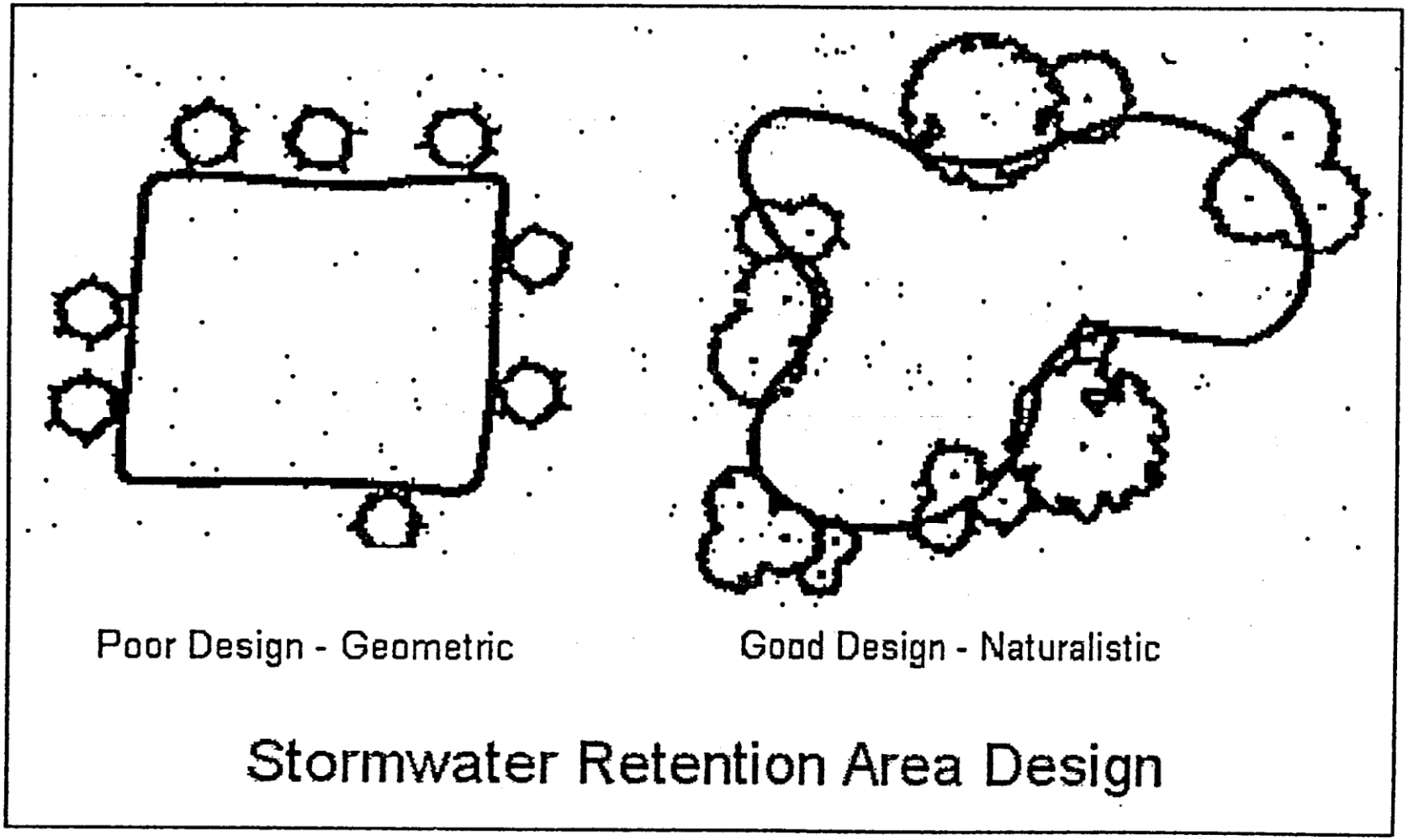
NOTE: (HANDICAP SIGN ONLY)

1. ALL LETTERS SHALL BE BLACK AND SHALL CONFORM TO FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
2. TOP PORTION OF SIGN SHALL HAVE REFLECTORIZED (ENGINEERING GRADE) BLUE BACKGROUND WITH WHITE REFLECTORIZED LEGEND AND BORDER.
3. BOTTOM PORTION OF SIGN SHALL HAVE A REFLECTORIZED (ENGINEERING GRADE) WHITE BACKGROUND WITH BLACK BORDER.
4. ONE SIGN REQUIRED FOR EACH PARKING SPACE.
5. HEIGHT OF SIGN SHALL BE 7' ABOVE GROUND IN ACCORDANCE WITH FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS .

HANDICAP RAMP AND PARKING STALL DETAIL

N.T.S.


ENCLOSURE
PLAN
NOTE: ALL CONSTRUCTION MUST
MEET ALL LOCAL AND STATE STANDARDS
GATE STOP
STEEL FRAMED GATE AS SHOWN SWING INWARD
10 Ft. MIN
3 Ft. MINIMUM PERSONNEL ACCESS DOOR PREFERRED
STEEL FRAME GATE 6 Ft. IN HEIGHT WITH PRIVACY SLATS EACH GATE TO HAVE LOCKING TABS INSTALLED
6 in. DIAM. POST 6 Ft. IN HEIGHT
8 Ft. 8 In.
18 Ft. WIDE
18 Ft.
50 Ft. DIRECT LEVEL APPROACH "TO THE ENCLOSURE"
26 Ft. MINIMUM VERTICAL CLEARANCE "POWER LINES, ETC."
6 in. DIAM. POST 6 Ft. IN HEIGHT
"ENCLOSURE SHALL BE ON A LEVEL PAD AT GROUND LEVEL"
THE AREA BETWEEN THE PAD AND PICK UP AREA SHALL BE A PAVED AREA 8FT DEEP FOR THE WIDTH OF THE ENCLOSURE AND SHALL NOT EXCEED A GRADE OF 2 PERCENT.
STEEL FRAMED GATE AS SHOWN SWING INWARD
8 in. CONCRETE DUMPSTER PAD 3,000 PSI MINIMUM
WALLS ARE 6FT IN HEIGHT SCREEN MATERIAL WITH PRIVACY SLATS BLOCK OR CONCRETE
GATE STOP
GIS
City of Leesburg
DATE
FILE NAME
DRAWN BY
CHECKED BY



Stormwater Retention Area Design

Leesburg Fire Department

201 S. Canal Street Leesburg, FL 34748
Phone: (352) 435-9472 Fax: (352) 728-9784

Fire Flow Requirements

Effective November 1, 2006

Class 1 Flow:
Structure Size: Less than 3000 square feet
Number of hydrants: 1
Minimum Main Size: 8 inch
Hydrant Spacing: Within 200 feet from building

Class 2 Flow:
Structure Size: 3001 to 10,000 square feet
Number of Hydrants: 2
Minimum Main Size: 8 inch
Hydrant Spacing: Within 200 feet from building

Class 3 Flow:
Structure Size: 10,001 to 25,000 square feet
Number of Hydrants: 3
Minimum Main Size: 8 inch
Hydrant Spacing: Within 200 feet from building

Class 4 Flow:
Structure Size: 25,001 to 45,000 square feet
Number of Hydrants: 4
Minimum Main Size: 12 inch
Hydrant Spacing: Within 200 feet from building

Class 5 Flow:
Structure Size: 45,001 to 75,000 square feet
Number of Hydrants: 5
Minimum Main Size: 12 inch
Hydrant Spacing: Within 200 feet from building

Class 6 Flow:
Structure Size: Greater than 75,000 square feet
Number of Hydrants: 6
Minimum Main Size: 12 inch
Hydrant Spacing: Within 200 feet from building

Note 1 - Buildings having approved fire sprinkler systems may reduce hydrant requirements by 50 percent depending on occupancy type as determined by the Fire Marshal.

Note 2 - Hydrant spacing for all one and two family dwelling shall be within 300 feet from the dwelling and minimum main size shall be 8 inches.

LEESBURG
The Lakefront City

SITE PLAN APPLICATION

Please type or print legibly (use blue or black ink). All blanks must be complete. Use N/A where not applicable.

Today's Date: _____

1)

Project Name	
Project Description	
Plan Date	

2)

Parcel ID		Zoning			
Section		Township		Range	
Alternate Key #					

3)

Owner's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

4)

Contractor's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

5)

Engineer's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

6)

Contact Person's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

7)

Plan Review #			

PROPERTY OWNER & AGENT AFFIDAVIT*

DATE: _____

Before me, the undersigned authority personally appeared _____ (property owner's name), who being by me duly sworn on oath, deposes and says:

1. That said authority is the fee-simple owner of the property legally described in this application.

2. That said authority desires SITE PLAN REVIEW for: _____
(Project name)

3. That said authority (property owner) has appointed _____ (agent's name) to act in his behalf to accomplish the above, and before me the undersigned authorized agent personally appeared and, being by me duly sworn on oath, deposes and says:

   A. That he/she affirms and certifies that he/she understands and will comply with all ordinances, regulations, and provisions of the City of Leesburg, Florida, and that all statements and diagrams submitted herewith are true and accurate to the best of his/her knowledge and belief, and further, that this application and attachments shall become part of the Official Records of the City of Leesburg, Florida, and are not returnable.

   B. That the submittal requirements for the application have been completed and attached hereto as part of the application.

* **PROPERTY OWNER <u>MUST</u> SIGN AFFIDAVIT.**

_____
PROPERTY OWNER'S SIGNATURE

STATE OF FLORIDA
COUNTY OF LAKE

The foregoing instrument was acknowledged before me this _____day of _____, 20_____, by _____.

Personally Known _____ OR Produced ID _____

Type of Identification
Produced _____

_____
Notary's Signature

_____
NOTARY SEAL

_____
AGENT'S SIGNATURE

The foregoing instrument was acknowledged before me this _____day of _____, 20_____, by _____.

Personally Known _____ OR Produced ID _____

Type of Identification
Produced _____

_____
Notary's Signature

_____
NOTARY SEAL

CITY OF LEESBURG
GENERAL BUILDING AND COMMERCIAL MANUFACTURED BUILDING
SITE PLAN CHECKLIST

Site plans are required for all new commercial construction, change of use (new occupancy classification) of existing structures, and new multi-family structures. All site plans are required to be approved prior to issuance of building permits.

PLEASE SUBMIT ALL PLANS, SPECIFICATIONS, REVISIONS, ETC. TO LEESBURG PLANNING & ZONING DIVISION. SUBMITTAL OF PLANS, ETC. TO ANY OTHER DEPARTMENT WILL RESULT IN DELAY OF REVIEW AND PERMITTING. NO REVISIONS WILL BE ACCEPTED UNTIL ALL COMMENTS HAVE BEEN RECEIVED FROM THE DEPARTMENTS. THESE COMMENTS WILL BE SENT AS SOON AS ALL ARE RETURNED.

The information listed below must be submitted for review of all new construction projects and additions:

	ITEM	SUBMITTED YES	SUBMITTED NO
1)	Plan Review Fee ($1,000 for major, $450 for minor, $200 for re-submittals) Must be paid at time of submittal/re-submittal, if applicable.		
2)	Statement and Proof of Ownership or Control of the Property Include legal description and alternate key number		
3)	Unity of Title Document with Single Alternate Key for Site with Multiple Parcels		
4)	Statement Describing the Character and Intended Use of the Property Including Potential/Planned Expansion		
5)	Three (3) Drawing files shall be submitted in native AutoCAD release 14, 2000 format or newer.		
6)	Three (3) Copies of Site Plan (Sealed)		
	a. Project Name		
	b. Names of Owner, Developer, Architect, and/or Engineer Include addresses and telephone numbers.		
	c. North Arrow		
	d. Location Plan		
	e. Boundary Survey at a Scale of 1"= 100' or Larger Showing:		
	i. Existing Streets, Buildings, Water Courses, Easements, etc. within 50 Feet of Property Lines		
	ii. Exact Location, Site and Setbacks of Proposed and Existing Buildings		
	iii. Provisions for Access and Traffic Control		
	iv. Parking and Loading Areas Including Screening and Buffers		
	v. Recycling and Refuse Collection (Dumpster Pad) Locations		
	vi. Public Utilities Serving Site and Proposed Connections and Meter Locations. **Show any well on property and closure method**.		
	vii. Septic Tank **(May not be Allowed by Leesburg Ordinance)**		
	If Yes, the Following Information is Required:		
	a. Letter from Wastewater Dept. Certifying Sewer is not Available. **Septic Tanks are not allowed without letter.**		
	b. State Permit		
	c. Septic Tank Location on Site Plan		

	ITEM	SUBMITTED YES	NO
	viii. Existing Septic Tank Location		
	ix. Designated Flood Hazard Zones		
	x. Topographic Survey Two (2) copies One (1) foot intervals at USGS datum (existing and proposed) for site and 50 foot surrounding property lines		
	xi. Finished floor elevations of each building relative to finished grade		
	xii. Spot Elevations at Corners, Changes of Grade, Driveway at Property Line, and along Property Line to Determine Impacts on Adjoining Property		
	xiii. Electrical Requirements (**Size of Service to Evaluate TransformerSize, etc.**)		
	xiv. Gas / BTU load requirements for each requested service		
7)	Landscape Plans (3 copies)		
8)	Irrigation Plans (3 copies) - Existing water & gas meter and new location, if applicable.		
9)	Calculations:		
	a. Total Gross Acreage, Total Project Density per Acre and Percentage(s) Devoted to Permitted Use(s)		
	b. Ground Coverage by Structure Impervious Surface and "Green Space"		
	c. Derivation of Off-Street Parking Spaces, If Utilized		
	d. Tree Survey and Proposed Removal per Chapter 25 of Leesburg Code of Ordinances		
	e. Total Impervious Surface Coverage in Square Feet Include Walkways, Driveways, All Buildings, etc. within Project Site.		
10)	Provisions for Maintenance of Common Area, If Applicable		
11)	Site Stormwater Retention Areas with Supporting Calculations (2 sets) and Route of Outlet per Chapter 19 of Leesburg Code of Ordinances, Sealed by an Engineer		
12)	St. Johns River Water Management District Permit (required prior to issuance of permit)		
13)	Site Utility Service Extensions, If Required:		
	a. Location, Type, and Size of Existing Utilities Around Site Meter(s) Size and Use; Backflow Prevention Detail; Landscape Plan.		
	b. Details for Abandonment of Wells per City Code Section 22-152		
	c. Details for Abandonment of any Septic Tank per City Code Section 22-65		
	d. Location, Type, and Size of Proposed Extensions per Local Standard and Specifications and State Requirements		
	e. City Approval Prior to Submitting to Outside Agencies		
	f. Inclusion of Service Details per City Standards and Specifications (Include Workmanship & Material Specifications)		
	g. Data and Submittals from Engineer for Water and Sewer Extensions (Fire Flows, Demands, Permits)		
	h. Water Connection Detail (s) (See Attachment)		

	ITEM	SUBMITTED YES	NO
14)	Street and Drainage Construction:		
	a. Right-of-way Layout and Control Data		
	b. Roadway Layout to Include Curve Data, Profiles, Cross-sections, Soil Borings, Underdrains, etc.		
	c. Drainage Swales, Structures, Inverts, Type of Pipe		
	d. Outside Agency Approvals Required Prior to Issuance of Building Permits		
	i. FDOT Drainage Permit		
	ii. FDOT Driveway Permit		
	e. Sidewalks and Curbing, where Required		
	f. Access Management		
	g. Handicap Ramp and Parking Stall Detail (See Attachment)		
15)	Copy of any Zoning/ variance or Conditional Use Permit		
16)	Tree Removal Permit Application		
17)	Applicant acknowledges that "As-Built" Drawings must be submitted prior to Certificate of Occupancy being issued		

THIS LIST DOES NOT WAIVE ADDITIONAL INFORMATION THAT MAY BE REQUIRED BY THE CITY OF LEESBURG OR ANY OTHER DEPARTMENT OR AGENCY.

I, THE UNDERSIGNED, CERTIFY THAT I HAVE READ, UNDERSTAND AND AGREE TO COMPLY WITH ALL OF THE INSTRUCTIONS CONTAINED WITHIN THE APPLICATON AND THE ATTACHED INSTRUCTION PACKET. I ALSO CERTIFY THAT THE INFORMATION SUBMITTED WITH THIS CHECKLIST IS COMPLETE AND ACCURATE AND AGREE TO MEET ANY ADDITIONAL REQUIREMENTS INCLUDED WITH THIS PACKET.

Project Name	

Certified Complete By	
	Signature (Owner, Developer or Authorized Agent)
	Print or Type Name

Person to notify when review is complete			
Contact Phone		Fax Number	
Cell Phone		E-mail	

TREE REMOVAL PERMIT APPLICATION

Today's Date: _____

Project Name: _____

1)

Project Name					
Property Address					
City		State		Zip	

2)

Owner's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

3)

Petitioner/Agent's Name					
Mailing Address					
City		State		Zip	
Contact Phone		Fax Number			
Cell Phone		E-mail			

4)

Property is generally located near the following streets:				
Size of subject property		+/- Acres		+/- Sq. Feet
Existing Zoning				
Present use of property				
Proposed use of property				

5)

A tree removal permit is requested for the following reason(s):

Signature below acknowledges that Heritage Trees (greater than 12") may require services of a licensed arborist at the expense of the applicant prior to issuance of decision on the permit.

_____
PROPERTY OWNERS' SIGNATURE

STATE OF FLORIDA
COUNTY OF LAKE

_____
Notary's Signature

Sworn to (or affirmed) and subscribed before me
this _____day of _____, 20_____,
by _____.
Personally Known _____ OR Produced ID _____
Type of Identification
Produced _____

NOTARY SEAL